

Date: Sun, 30 May 93 09:02:57 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #660
To: Info-Hams

Info-Hams Digest Sun, 30 May 93 Volume 93 : Issue 660

Today's Topics:

 AMSAT-149 BULLETINS
 Daily Solar Geophysical Data Broadcast for 29 May
 IC 271/471 vs IC 275/475 Performance Question
 Intermod/spurious sigs a common HT problem?
 Modifying ICOM 24AT
 XPCOM131.ZIP

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 30 May 93 15:57:08 GMT
From: news-mail-gateway@ucsd.edu
Subject: AMSAT-149 BULLETINS
To: info-hams@ucsd.edu

SB SAT @ AMSAT \$ANS-149.01
ARSENE STATUS REPORT

HR AMSAT NEWS SERVICE BULLETIN 149.01 FROM AMSAT HQ
SILVER SPRING, MD MAY 29, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-149.01

ARSENE Attitude Re-Adjustment Successful! OPERATIONS BEGIN 01-JUN-93!!

F6BVP reports that the spacecraft attitude re-adjustment for ARSENE was a
complete success. And as result of this successful operation, radio ama-

teurs can expect the Mode-S transponder to be open for traffic on Tuesday, 01-JUN-93! All are invited to use ARSENE's Mode-S transponder with its up-link frequency of 435.100 MHz and its downlink frequency of 2446.50 MHz. The successful attitude orientation change occurred on 27-MAY-93 between 03:00 UTC and 08:00 UTC when ground controllers sent the commands to have ARSENE's propulsion system to begin slowing the spacecraft's spin rate from 70 RPM to 30 RPM. The spin-down was accomplished through the firing of pressurized nitrogen gas from two nozzles located on the spacecraft. At the same time, the spacecraft attitude was changed from being inclined 15 degrees to 45 degrees with respect to the orbital-plane. The 45 degree angle will provide the best compromise between antenna pointing for the Mode-S dipole antennas and for solar panel illumination. At the present time ground controllers have taken the weekend off from 27-MAY-93 until 01-JUN-93 for a much deserved rest. Consequently, they have turned off the VHF transmitter. They are still requesting that radio amateurs continue their search for the VHF downlink between 140-150 MHz when they turn it back on 01-JUN-93. If the damaged Local Oscillator (LO) crystal is still working on the VHF transmitter, finding the telemetry signal from ARENE's VHF beacon between 140-150 MHz will go a long way in helping ground controllers to understand this failure. Therefore, they encourage all radio amateurs to continue their VHF "scan" and to enjoy the operations on Mode-S from ARESENE. The Radio Amateur Club of Space (RACE) would like to thank all radio amateurs for the numerous messages of congratulations they have received concerning the launch of this new radio amateur satellite. Please stay tuned to the AMSAT HF/VHF nets and the AMSAT News Service (ANS) bulletins for any further updates about the status of ARSENE.

[The AMSAT News Service (ANS) would like to thank F6BVP for the information which went into this bulletin item. If you would like to write to F6BVP, his INTERNET address is f6bvp@amsat.org and on packet he can be reached at f6bvp@f6bvp.frpa.fra.eu. Please send your signal reports and any other telemetry data to F6BVP at either of the above addresses.]

/EX

SB SAT @ AMSAT \$ANS-149.02
UNAMSAT-1 MICROSAT DESCRIPTION

HR AMSAT NEWS SERVICE BULLETIN 149.02 FROM AMSAT HQ
SILVER SPRING, MD MAY 29, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-149.02

XE1TU Provides Details About A New MICROSAT

Dr. David Liberman (XE1TU) reports that a new amateur radio MICROSAT is being prepared for launch this summer by engineering students and the faculty at the Autonomous University of Mexico (UAM). This particular MICROSAT, designated as UNAMSAT-1, shares many of the same design char-

acteristics as its "cousins," AO-16 and LU-19. The biggest difference is there will be included a special module to perform scientific experiments to determine the speed of meteorites falling into the earth's atmosphere from space. This special science "module" on UNAMSAT-1 will be contained in a an area of the MICROSAT known as the "This-Space-For-Rent" (TSFR). The TSFR was part of the original MICROSAT design and was intended to house scientific and educational experiements aboard the MICROSATs. For example, on DOVE (DO-17), the TSFR was where the special voice-speech module was located. In the case of LO-19, the CW beacon telemetry transmitter was also placed in the TSFR module. But for UNAMSAT-1, the TSFR module will contain a 70 watt RMS peak-pulse trans-mitter, a single conversion receiver with simultaneous LSB and USB detectors, and a control circuit built with a Motorola 68HC805B6 microprocessor. The microprocessor will control the pulse duration and the repetition rate for the RF pulses sent out on a frequency of 41 MHz. The pulse durations will be from 1 ms to 10 ms with a repetition rate from one pulse-per-second to one pulse every 10 seconds. This microprocessor will also perform an analog-to-digital (A/D) conversion of the received echoes and will verify if the echoes have the approximate doppler-shift that scientist normally observe from meteorites. If the echoes meet the proper criteria, then the microprocessor will increases the pulse repetition rate and start sending the digitized echoes to a Random Access Memory (RAM) buffer located on the main CPU board. This doppler-shift data will then become part of a file which that the user can then download to study and analyze. With special ground-processing software that will be made available from AMSAT, radio amateurs will be able to determine the speed of the meteorites that UNAMSAT-1 has observed. When UNAMSAT-1 is not being used for meteorite speed determination, it will perform the regular duties of a Bulletin Board System (BBS) like AO-16 and LO-19. The BBS software for UNAMSAT-1 will be the same as that used on AO-16 and LO-19. This will allow users of AO-16 and LO-19 to continue to use their stations for BBS operations as they currently are doing, but with UNAMSAT-1 they have the added excitement of participating in a space sciences experiment. The current frequencies for UNAMSAT-1 are as follows: TX1=437.200 MHz, TX2=437.060 MHz and the RX1=145.83 MHz, RX2=145.85 MHz, RX3=145.87 MHz. The pulse transmitter frequency is in 40.997 MHz. Please watch for further updates and status reports on UNAMSAT-1 in the AMSAT News Service (ANS) bulletins.

[The AMSAT News Service (ANS) would like to thank Dr. David Liberman (XE1TU) of for the information which went into this bulletin item. Dr. Liberman can be reached on INTERNET at xe1tu@amsat.org]

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SB SAT @ AMSAT \$ANS-149.03
STS-57/SAREX STATUS REPORT

HR AMSAT NEWS SERVICE BULLETIN 149.03 FROM AMSAT HQ
SILVER SPRING, MD MAY 29, 1993

TO ALL RADIO AMATEURS BT
BID: \$ANS-149.03

STS-57/SAREX Mission Scheduled For 14-JUN-1993 Lift-Off

KA3HDO reports that the next Shuttle Amateur Radio Experiment (SAREX) has been tentatively scheduled to lift-off during the week of 14-18 of June. The STS-57/SAREX payload will carry 2M voice and packet radio capability. STS-57 is the next in a series of 5 SAREX missions being planned for this year. Originally slated to lift-off 03-JUN-93, a concern about a part in the Shuttle Endeavour's #2 main engine liquid-oxygen fuel turbopump caused NASA officials to decide to delay the launch until the turbopump could be replaced with another one. This particular shuttle mission will have a low orbital inclination of 28.5 degrees. Look for keplerian elements and a list of SAREX frequencies in next week's AMSAT News Service (ANS) bulletins.

[The AMSAT News Service (ANS) would like to thank Frank Bauer (KA3HDO) of the SAREX working group for the information which went into this bulletin item.]

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SB SAT @ AMSAT \$ANS-149.04
EOSS BALLOON CONFERENCE SET

HR AMSAT NEWS SERVICE BULLETIN 149.04 FROM AMSAT HQ
SILVER SPRING, MD MAY 29, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-149.04

Edge Of Space Sciences (EOSS) Prepares For First Balloon Conference

Edge of Space Sciences (EOSS) is sponsoring a National Balloon Symposium on August 20-22, 1993 at the Denver International Airport Holiday Inn, Denver, Colorado.

Subjects will include: Amateur Radio Applications, Basic Balloon Flight Procedures, FAA & FCC Regulations, Balloon and Payload Systems, Applications to Education & Science, Student Participation Projects, Balloon Organization Development, and Payload Tracking & Recovery.

EOSS also wishes to invite balloon experimenters, educators, authors and scientists involved with high altitude balloon experiments to provide papers and presentations at the National Balloon Symposium. Papers should be submitted in electronic form. For deadline information, contact Ann Trudeau, 15487 E. Bates Ave., Aurora, CO 80013, (303) 690-1669.

Registration includes all events at the Symposium, two meals on Saturday, and a copy of the Proceedings. For more information contact Ted Cline (N0RQV), (303) 493-1136, or on INTERNET at ted_cline@hplsla.lvld.hp.com.

/EX

SB SAT @ AMSAT \$ANS-149.05
AMSAT-UK SPACE SYMPOSIUM INFO

HR AMSAT NEWS SERVICE BULLETIN 149.05 FROM AMSAT HQ
SILVER SPRING, MD MAY 29, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-149.05

AMSAT-UK Space Symposium Set 29-JUL-93 to 01-AUG-93

Please be advised that the Eighth Annual AMSAT-UK Colloquium will take place at the University of Surrey Conference Halls and New Space Building from beginning in the morning of Thursday, 29-JUL-93 to the evening of Sunday, 1-AUG-93.

The Secretary of AMSAT-UK advises that there are over eighteen Papers already promised with more to arrive plus plenty of 15 and 30 minute talks, and demo without Papers being presented by members during the four days of Colloquium '93.

Please be advised that ALL delegates who attended 1992 Colloquium will receive an Application Form as a matter of course. These will be sent out to all addreses on last years file on 25th MAY 1993. Any other person or groups who wish to addend, should send a stamped addressed envelope, or 3 IRCs to Ron Broadbent (G3AAJ), AMSAT-UK, London E12 5EQ England before 15-JUN-93. Mark on the top corner of the envelope: "Request for Colloquium Application." This enables coordinators to get the applications to you posted the same day as they are received with other mail.

Please also note: This Colloquium is a Satellite Get-together and we welcome ANYONE giving us their experiences, tips, technical advise and new ideas. This is a FUN by learning weekend in the South of England Countryside.

[The AMSAT News Service would like to thank Ron Broadbent (G3AAJ), the Hon. Sec. of the AMSAT-UK organization for this bulletin item.]

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SB SAT @ AMSAT \$ANS-142.06
AMSAT OPS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 142.06 FROM AMSAT HQ
SILVER SPRING, MD MAY 29, 1993
TO ALL RADIO AMATEURS BT

BID: \$ANS-142.06

AMSAT Operations Net Schedule

AMSAT Operations Nets are planned for the following times. Mode B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz.

Date	UTC	Mode	Phs	NCS	Alt NCS
5-Jun-93	2000	B	147	WB6LLO	WA5ZIB
12-Jun-93	2300	B	132	WA5ZIB	WJ9F
19-Jun-93	1600	B	149	W9ODI	N7NQM

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations are encouraged to join the OPS Nets. In the unlikely event that either the Net Control Station (NCS) or the alternate do not call on frequency, any participant is invited to act as the NCS.

Slow Scan Television on AO-13

SSTV sessions will be held on immediately after the OPS Nets a downlink on a Mode-B downlink frequency 145.960 MHz.

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SB SAT @ AMSAT \$ANS-149.07

RS-10/AO-21 DUAL-HOP REPORTS

HR AMSAT NEWS SERVICE BULLETIN 149.07 FROM AMSAT HQ

SILVER SPRING, MD MAY 29, 1993

TO ALL RADIO AMATEURS BT

BID: \$ANS-149.07

GONKA Provides Results Of The Dual-Hop Experiments With RS-10 & AO-21

GONKA rpeorts that the results of Dual-Hop Experiment #3 between RS-10 and AO-21 was quite successful. The purpose of these experiments is to make a contacts going through two different OSCARs. The following are the a brief summary of the results of these experiments performed on 16-MAY-93.

Window #1:

Nothing on this orbit due to too many users of RS-10.

Window #2:

Better this one. Dave G4CU0 worked Oscar DJ0MY,DL1SM, and heard PA3FMG and IK7FGE.

Date	Time	Sat	Lat	Lon	QRA Sub Sat	Separation Approximate	Station Heard
930516:1254.45		RS14	45.1N	15.4E	JN75QC		
		RS10	55.7N	5.6E	J015TQ	1661 KM	DJ0MY
930516:1257.10		RS14	53.3N	17.3E	J083PH		
		RS10	47.6N	5.6E	JN27T0	1201 KM	IK7FGE

Window #3:

On this orbit the transponder was switched off so we didn't get any contacts, but it was back on for the next orbit so the new software routine seems to be working.

Window #4:

All OK on this orbit and G4CU0 worked KM3B, KA8CNI, W8TX, and F9SR. There are other signals on the tape which will have to be noise filtered to make them clear.

930516:1625.40	RS14	49.4N	36.4W	KN89EJ			
	RS10	52.5N	48.2W	L042CM	1037 KM	KM3B	559
930516:1627.20	RS14	55.1N	34.9W	K075KC			
	RS10	46.9N	47.0W	LN36MV	1438 KM	F9SR	559

The DoHop Group awaits further reports from many stations in Europe and USA who heard this experiment but did not transmit. A very successful day with many thanks to the ground controllers at RS3A and UA3CR, all in Moscow, for setting these DoHop Experiments up and making them a success.

[The AMSAT News Service (ANS) would like to thank G0NKA for this bulletin item. If you would like to learn more about the DoHop Experiments, G0NKA can be reached at his packet radio address of G0NKA @ GB7DTX.#26.GBR.EU]

/EX

SB SAT @ AMSAT \$ANS-149.08

WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 149.08 FROM AMSAT HQ
SILVER SPRING, MD MAY 29, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-149.08

Weekly OSCAR Status Reports: 29-MAY-93

AO-13: ATTITUDE CHANGE

L QST *** AO-13 TRANSPONDER SCHEDULE *** 1993 May 10 - May 31

Mode-B : MA 0 to MA 130 ! Omnis MA 250 - MA 60

Mode-BS : MA 130 to MA 180 !<- S transponder; B trsp. is ON
Mode-S : MA 180 to MA 190 !<- S transponder; B trsp. is OFF
Mode-LS : MA 190 to MA 195 !<- S beacon + L transponder
Mode-JL : MA 195 to MA 210 ! Blon/Blat 210/0
Mode-B : MA 210 to MA 256 ! Move to attitude 120/0, May 31
Please don't uplink to Mode-B during MA 180-190. Doing so will interfere
with Mode-S operations. Mode-S will be ON for nearly 3 hours, from MA 130
to MA 195. New Mode-S stations appear daily. During MA 130-180, Mode-S
stations will have to endure the coupling from the Mode-B users operating
between the downlink passband between 145.880-145.920 MHz. Either work
between them, use them as test signals, or go to cross-band operations.

Date: 30 May 93 15:16:46 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 29 May
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 149, 05/29/93
10.7 FLUX=129.0 90-AVG=121 SSN=130 BKI=3233 1222 BAI=009
BGND-XRAY=B4.5 FLU1=3.1E+05 FLU10=1.2E+04 PKI=4324 1223 PAI=012
BOU-DEV=025,012,024,034,006,015,010,013 DEV-AVG=017 NT SWF=00:000
XRAY-MAX= C3.4 @ 1504UT XRAY-MIN= B3.6 @ 2109UT XRAY-AVG= B6.8
NEUTN-MAX= +000% @ 0000UT NEUTN-MIN= +000% @ 0000UT NEUTN-AVG= +0.0%
PCA-MAX= +0.0DB @ 0000UT PCA-MIN= +0.0DB @ 0000UT PCA-AVG= +0.0DB
BOUTF-MAX=55396NT @ 0154UT BOUTF-MIN=55334NT @ 1755UT BOUTF-AVG=55357NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+070,+000,+000
GOES6-MAX=P:+124NT@ 1728UT GOES6-MIN=N:-101NT@ 0209UT G6-AVG=+095,-019,-051
FLUXFCST=STD:135,140,140;SESC:135,140,140 BAI/PAI-FCST=005,010,010/010,010,010
KFCST=1112 2111 1112 2111 27DAY-AP=007,010 27DAY-KP=2222 2222 2134 3311
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 28 MAY 93 was 60.0.
The Full Kp Indices for 28 MAY 93 are: 4- 4+ 3o 3+ 3o 4- 3o 4-

Date: Sun, 30 May 1993 14:16:24 GMT
From: swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU
Subject: IC 271/471 vs IC 275/475 Performance Question
To: info-hams@ucsd.edu

In article <C7r5px.8un@freenet.carleton.ca> ae517@Freenet.carleton.ca (Russ
Renaud) writes:

>

>Whoa minute! As a very new owner to a previously owned 251A, I'd
>like to have this claimed superiority between the 211 and the 251
>better substantiated, or at least better explained. All the, or
>the beeter part of the 211's being sold on the used markets were
>sold as handyman's special, the PLL had gone south and either
>the owner was incapable of repairing them OR our local Icom
>distributor was unable to provide parts or service. The one
>211 I actually saw working had a very crude freq generation/pll
>scheme and was quite awkward to use compared to the 251A.

Well my experience certainly differs on this. My 211, early SN,
was rock reliable up until the day the lightning disaster I've
written about previously occurred. And it's frequency generation
schene is far superior to the clunky method used in the 251. When
you change modes on the 211, the carrier frequency does not change.
On the 251 it jumps when changing modes, forcing you to retune.
That's particularly annoying on the satellites when you may wish
to mode switch CW/LSB/USB frequently when going from Morse to voice
to RTTY. The display is easier to read than on the 251, and gives
less trouble. The 211 is also a dream to modify, unlike the 251.

>Relating to this, what DOES the Mutek front end provide to a 251
>owner that a good preamp will not?? Certainly anyone who would
>want to use this rig for satcoms or EME would put an outboard
>preamp on this rig anyway.
>Could Gary or someone elaborate on this?

Ok, the one weakness of the 211/251 is a front end that has low intercept,
and a PIN TR switching system with high insertion loss. These two
combine to make a radio that performs poorly as a weak signal receiver
in a high RF environment. What the Mutek board does is replace the PIN
TR with a sealed Teledyne RF relay, and replace the mixer and post
amplifier with a Mini Circuit DBM and FET. The phase noise of the LO is
already quite low for the era, only the 275 is markedly better. The
result is a strong and sensitive receiver. The board for the 251 is
similar, but the phase noise of the 251 LO isn't quite as good so the
results aren't quite as impressive.

The reasons you can't just fix the problem with a antenna mounted GASFET
preamp are that the insertion loss of the PIN TR is high (12 db), and the
existing mixer can't stand strong signals. So if you put a really "hot"
preamp at the antenna to overcome both cable loss and PIN TR loss, not
only is the preamp going to be squirrely, but strong local signals are
going to play hell with the already weak mixer. By installing the Mutek
board, you can use a preamp with a bit less gain, and likely an accompanying
better noise figure, at the antenna to overcome cable and mixer losses,
and wind up with a better overall system.

>If not just a perceived difference, where could one get the
>Mutek board, if it makes that great of a difference?

Muttek is a British company, I'll have to dig out their address and post it later.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Sun, 30 May 1993 13:09:06 GMT
From: swrinde!emory!kd4nc!ke4zv!gary@network.UCSD.EDU
Subject: Intermod/spurious sigs a common HT problem?
To: info-hams@ucsd.edu

In article <C7rL3A.y9@iat.holonet.net> bwilkins@iat.holonet.net (Bob Wilkins n6fri) writes:

>One feature often overlooked is ctcss or pl decode. Many repeaters
>transmit the same pl tone used to access the repeater. You can use the
>decode mode to monitor the repeater. You will not hear the intermod. Quite
>often this feature is standard on new handhelds or is a plug-in board at
>added cost, but is worth the investment.

Let me say that this is a Good Thing(tm) for repeaters to do. Mine is setup to do output CTCSS. However, it's not an intermod *cure*. It just reduces the irritation factor when you are monitoring the *inactive* repeater channel. Once the repeater comes up, if it's strong enough to override the crud, you'll hear it, but you're likely to hear the intermod crud too, all mixed together. If the repeater's signal isn't strong enough to capture the receiver away from the intermod, then you'll either hear silence while your S meter is pinned, or the squelch will "chug" on and off. Neither are attractive options. Output CTCSS is a useful *symptom* suppressor, but it's not a cure for the disease of intermod. Only a well designed RF frontend system in your radio can do that.

I am occasionally pestered by users who want the repeater output power raised so that their radios will work through the intermod. I strongly resist this pressure because it's not a repeater problem and I don't want an alligator at 1970 feet. I've got the output power balanced so that a *competent* radio is reciprocal with the machine, IE each can hear the other equally well.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 30 May 93 14:02:47 GMT
From: parmesan.cs.wisc.edu!rcmolden@rsch.wisc.edu
Subject: Modifying ICOM 24AT
To: info-hams@ucsd.edu

I have been told that there is a code that you enter from the keyboard to make the ICOM 24AT into a scanner, ie that you can scan frequencies in the same way there new combo scanner/2m handy talkie does, well outside the 2m 70cm bands. Trouble is, nobody I talk to knows the numbers, could some kind soul out there tell me how to do this. Thanks.

Is this true of other radios, as well?

Date: Sun, 30 May 1993 11:26:11 GMT
From: dxis!k2ph@uunet.uu.net
Subject: XPCOM131.ZIP
To: info-hams@ucsd.edu

Date: Sun, 30 May 1993 13:25:02 GMT
From: swrinde!emory!kd4nc!ke4zv!gary@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1787700025@trsvax>, <1u5ut5\$m4p@access.digex.net>,
<1993May29.044220.18566@kd4nc.uucp>
Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: Radio shack 2mtr ht, DTMF tone prob

In article <1993May29.044220.18566@kd4nc.uucp> n4tii@kd4nc.uucp (John Reed) writes:

>

>I think it's a rather dumb idea....on FM, it's kinda obvious when you unkey!

Sometimes it is, sometimes it isn't. It can depend on whether the receiver uses a noiseless squelch system or gives a crash on carrier loss. With

noiseless squelch, it's often difficult to tell whether the other operator has unkeyed or is merely taking a dramatic pause without some sort of beep. Many repeaters use a courtsey beep for this purpose, but if you're operating simplex, letting the transmitter beep before dropping carrier is a good way to simulate a verbal "over".

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Sun, 30 May 1993 14:35:30 GMT
From: swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1u5i4n\$Cqu@ux1.cso.uiuc.edu>, <oxenreid.738628325@chaos.cs.umn.edu>, <1993May29.173130.3929@kd4nc.uucp>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)

Subject : Re: Need for Radar Gun License RE: FCC Softball Fine

In article <1993May29.173130.3929@kd4nc.uucp> n4tii@kd4nc.uucp (John Reed) writes:
>oxenreid@chaos.cs.umn.edu () writes:

>

>>>>the answer was that they had been told the License for the VHF/UHF
>>>>radios in the car would cover it. I repeatedly told them that this
>> ^^^ What a lie!

>

>>Until circa 1986, the FCC required that all 'police radar' units be
>>individually licenced. Post 1986, the regs were changed du to the massive
>>influx of inexpensive radar units, and licencing became a real headache.
>>Now, your department can apply for a licence, with a \$50.00 fee (that may
>>have change though) and a licence supporting 100 (default) is issued. No
>>more need to put a sticker with the licence on top of the radar unit. The
>>officer need only know where the controll operating point is (ie the
>>technical end of the arm, so the FCC can go after them). This is also known
>>as a blanket licence.

>

>This puzzles me, then. I am a senior Criminal Justice major at one of the
>colleges here in Georgia. As part of my degree, I had to intern for a law
>enforcement agency. Well, I did mine at a somewhat rural Sheriff's Office
>in Northeast Georgia. We had an old radar license posted on the wall..but
>it had expired. I asked one of the investigators (who is a ham, and who
>coordinates all the licensing for the VHF stuff) and he told me the same
>thing as the other guy said...the department didn't need a separate license,

>that if they had a licensed channel on hi-band then the radar was already
>covered. I read a little of Part-90 at school one day and I found NOTHING
>to that effect. So basically, Mr. Investigator is full of crap...or at least
>he is going on a line of crap that someone else fed him.

>

>So, what should I tell him next time I see him (on friendly terms, of course),
>tell him that his radars are indeed unlawful as they aren't licensed? And,
>to clarify what you said earlier, then radars are now issued on a 'fleet'
>system?

Georgia departments using radar have to follow two sets of rules. One is the FCC rules, and the other is GA law. The current FCC requirement is simply a blanket departmental radar license as noted above. The GA requirements are that a department be certified by the State Patrol, that radar operators have completed the state radar course, that they follow a strict calibration procedure *each* time they set up to take speed readings, that they can't set up within 300 feet of a speed zone change, that they can't issue a ticket for less than 10 MPH over the posted limit, and several other restrictions designed to discourage the operation of speed traps.

There's a semi-amusing story related to the FCC and speed radars in Georgia. A now retired FCC Engineer in charge of the field office was stopped by local revenue enhancers. (This was pre-86) The cop starts to write him a ticket and the FCC engineer whips out *his* ID and demands to see the transmitter ID cards for the radar and the cruiser two way. The cop can't produce either. So they *both* have their violation books out now and both write the other up. The FCC has a bit more clout. The ticket was voided, and the department fined and told to stop using radar until they got their legal house in order. This same engineer cited the DeKalb county police for transmitting "false and misleading signals". They had mounted old retired radar units to the overhead signs on I-285 to make radar detectors useless due to the many false alarms. He made them take them down.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: (null)
From: (null)
What does it do?

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| Bob Schreibmaier K2PH | UUCP:      uunet!dxis!k2ph      | Free the |  
| (a.k.a. "The QRPer") | INTERNET: k2ph@dxis.monroe.pa.us | Intel   |  
| Kresgeville, PA     | ICBM:      40o55'N 75o30'W      | 486     |  
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Date: (null)

From: (null)

MIR: Many of the stations which check into the AMSAT 20M International Satellite Net on Sundays have asked that the MIR QSL address be published. The following address is that of Sergei Samburov (RV3DR) who acts as the QSL Manager for the MIR space station:

Sergei Samburov (RV3DR)
Prospect Kosmonavtov. d.36, kw.96
Kaliningrad City, MOSCOW 141070, RUSSIA.

Sergei can also be reached via packet radio as RV3DR @ RK3KP.#MSK.RUS.EU
[G3IOR]

U0-22: About a month ago G0SUL added routines to monitor the callsigns of stations using the PACSAT Broadcast Protocol (PBP) server. There have been over 400 different stations heard during 30 days of operation. Many stations (about 50%) are active at least every other day. Summarizing the activity for the week ending Wednesday, 26-MAY-93: the PBP server processed an average of 3,000 requests per day, and transmitted on an average day 8 MB of data and 7 MB of directory entries. The FTL0 server daily averages over that period were 143 logins for 211 messages and 502 KB uploaded.
[G0SUL, formerly G0/K8KA]

A0-21: The RUDAK-2 voice synthesizer on board A0-21 (RS14) is now transmitting PY2BJ0's Peace Message in the Russian language (female voice) and also in a English language voice. The FM mode repeater and 1200 baud AFSK AX.25 telemetry are also still in the schedule. A French language voice will be loaded next month. [DB20S]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you

provide will be of value to all OSCAR enthusiasts.

/EX

End of Info-Hams Digest V93 #660
